APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,162	01/03/2006	Per Jakobsen	941-012259-US (PAR)	2687

2512   7590   03/26/2008
PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 06824

EXAMINER
COLUCCI, MICHAEL C

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
03/26/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/539,162	JAKOBSEN ET AL.
	Examiner	Art Unit	
	MICHAEL C. COLUCCI	2626	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-39</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-39</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>14 June 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-9, 11-14, 16, 17, 20-27, and 29-37 rejected under 35 U.S.C. 103(a) as

being unpatentable over Haestrup US 6223059 B1 (hereinafter Haestrup) in view of

Lisle et al. US 4843389 A (hereinafter Lisle).

        Re claim 1, Haestrup teaches a mobile terminal (Fig. 1) comprising:

        - a display (Fig. 1 item 3);

        - means for entering text (Col. 1 lines 27-58 & Fig. 1 item 7);

        - a predictive editor program for generating an output containing words

completing a received string of ambiguous keystrokes or matching a received string of

ambiguous keystrokes (Col. 1 lines 27-58 & Fig. 1 item 7), said predictive editor

program has a number of associated vocabularies (Col. 3 lines 8-15) forming a

language dependent dictionary (Col 3 line 58 – Col. 4 line 5);

        characterized by comprising

        - at least one further program that is capable of compressing text data by

replacing words with references to said language dependent dictionary (Col. 4 lines 25-

38).

However, Haestrup fails to teach decompressing text data by retrieving words from said language dependent dictionary using references to said language dependent dictionary (Lisle Col. 4 lines 12-32).

Lisle teaches providing a plurality of language use specific dictionaries whose entries of words are ranked in a weighted frequency of usage ranking based on statistical studies of the areas of use employed. For example, words such as "docket" or "versus" or "case" will appear much more frequently in legal texts than in normal English usage. Similar professional jargon is found for other fields as well, engineering, business, accounting, medicine, agriculture, petro-chemicals, etc., etc., ad infinitum being possibilities. In the present invention, the user of a text compression and decompression system builds up dictionaries that are custom-tailored to the field of use. This is done by utilizing a scanning and analysis technique that incorporates counting both the number of characters in each unique word and the number of occurrences of the word within the general usage over a sample of texts from the user's environment. Multiple such dictionaries can be constructed and applied to maximum beneficial effect to achieve a high degree of compression for an individual user.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention compression or decompression of text from language specific dictionaries. Using compression or decompression relative to a language dictionary allows for a higher enabled compression ratio as well as the ability to rank dictionary entries based on a user specific degree (exclusion of non-user specific language

settings), where transmission speed is increased as a result (due to compression ratio and reduced dictionary selection).

Re claims 2 and 21, Haestrup teaches a mobile terminal according to claim 1, characterized in that said further program identifies words in data that is represented as a sequence of characters drawn from an alphabet in an input data block and processes it into an output data block in which character combinations (Col. 5 line 67 – Col. 6 line 9) that correspond to words contained in said language dependent dictionary are replaced by references to said language dependent dictionary (Col. 7 lines 10-19).

Re claim 3, Haestrup teaches a mobile terminal according to claim 1, in which said second program saves the words in said text as references to said language dependent dictionary and/or retrieves words from said language dependent dictionary using stored or received references (Col. 8 line 50 – Col. 9 line 6).

Re claims 4 and 23, mobile terminal according to claim 1, in which said second program sends data incorporating references to said language dependent dictionary to other terminals and/or retrieves words from said language dependent dictionary through references from data received from other terminals (Col. 8 line 50 – Col. 9 line 6 & Fig. 2 item 20).

Re claims 5 and 24, Haestrup teaches a mobile terminal according to claim 1, characterized in that said further program is a terminal operation program, said terminal operation program having at least one associated language data set for outputting text to the display, and said language data set contains references to said language dependent dictionary (Col. 8 line 50 – Col. 9 line 6).

Re claims 6 and 25, Haestrup teaches a mobile terminal according to claim 1, characterized in that said further program is a program for storing and retrieving text messages to and from said terminal and said program for storing and retrieving text messages stores words of said text messages as references to said language dependent dictionary and retrieve words of said text messages from said language dependent dictionary using stored or received references (Col. 8 line 50 – Col. 9 line 6).

Re claims 7 and 26, Haestrup teaches a mobile terminal according to claim 1, characterized in that said further program is a message handling program (Col. 1 lines 27-58 & Fig. 1 item 7) that sends text messages to other terminals, preferably PCs, servers or mobile phones (Col. 2 lines 32-41 & Fig. 2 item 20), whereby said text message contains references to said language dependent dictionary (Col. 8 line 50 – Col. 9 line 6).

Re claims 8 and 31, Haestrup teaches a mobile terminal according to claim 1, characterized in that said further program is an application program interface (API) (Col.

3 lines 8-15 & Fig. 3) that stores downloaded text data as references to said language

dependent dictionary (Col. 8 line 50 – Col. 9 line 6).

Re claim 9, Haestrup teaches a mobile terminal according to claim 1,

characterized in that said further program is a calendaring or task management program

(Col. 3 lines 15-19) that stores text entries as references to said language dependent

dictionary (Col. 8 line 50 – Col. 9 line 6).

Re claim 11, Haestrup teaches a mobile terminal according to claim 1,

characterized in that said further program stores said references on- or retrieves said

references (Col. 8 line 50 – Col. 9 line 6) from a removable data carrier (Fig. 2 item 16).

Re claims 12 and 35, Haestrup teaches a mobile terminal according to claim 1,

characterized in that said references are direct references to addresses in said

language dependent dictionary (Col. 8 line 50 – Col. 9 line 6).

Re claims 13 and 36, Haestrup teaches a mobile terminal according to claim 1,

characterized in that said references are strings of keystrokes through which the

predictive editor program (Col. 1 lines 27-58 & Fig. 1 item 7) can retrieve the words to

be used from said language dependent dictionary (Col. 8 line 50 – Col. 9 line 6).

Re claim 14, Haestrup teaches a mobile terminal according to claim 1, characterized in that said means for entering text comprises a keypad having plurality of keys, preferably a plurality of keys associated with several letters each (Col. 5 lines 7-36 & Table 1).

Re claim 16, Haestrup teaches a mobile terminal according to 14, characterized in that said keypad comprises discrete mechanical keys, and preferably a number of soft keys (Col. 5 lines 7-36 & Table 1).

Re claims 17 and 37, Haestrup teaches a mobile terminal according to claim 1, characterized in said mobile terminal is a communication terminal, preferably a mobile phone comprising processor means, memory means, digital signal processing means, RF transmitting and receiving circuitry, a microphone, a speaker and preferably a SIM card or other removable card having storage capacity (Fig. 2).

Re claim 20, Haestrup teaches a method of compressing data (Col. 4 lines 25-38) in a mobile terminal (Fig. 1) comprising the steps of:

storing a language dependent dictionary on said mobile terminal (Col 3 line 58 – Col. 4 line 5);

characterized by

compressing text data (Col. 4 lines 25-38) on said mobile terminal by replacing words in said text data with references to said language dependent dictionary (Col. 4 lines 25-38)

decompressing text data by retrieving words from said language dependent dictionary using references to said language dependent dictionary (Lisle Col. 4 lines 12-32).

Lisle teaches providing a plurality of language use specific dictionaries whose entries of words are ranked in a weighted frequency of usage ranking based on statistical studies of the areas of use employed. For example, words such as "docket" or "versus" or "case" will appear much more frequently in legal texts than in normal English usage. Similar professional jargon is found for other fields as well, engineering, business, accounting, medicine, agriculture, petro-chemicals, etc., etc., ad infinitum being possibilities. In the present invention, the user of a text compression and decompression system builds up dictionaries that are custom-tailored to the field of use. This is done by utilizing a scanning and analysis technique that incorporates counting both the number of characters in each unique word and the number of occurrences of the word within the general usage over a sample of texts from the user's environment. Multiple such dictionaries can be constructed and applied to maximum beneficial effect to achieve a high degree of compression for an individual user.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention compression or decompression of text from language specific dictionaries. Using compression or decompression relative to a language dictionary

allows for a higher enabled compression ratio as well as the ability to rank dictionary

entries based on a user specific degree (exclusion of non-user specific language

settings), where transmission speed is increased as a result (due to compression ratio

and reduced dictionary selection).

Re claim 22, Haestrup teaches a method according to claim 20, further

comprising the steps of:

- saving said output data block onto a fixed or removable memory of said mobile

communication terminal (Fig. 2);

and/or retrieving words from said language dependent dictionary through stored

references (Col. 8 line 50 – Col. 9 line 6).

Re claim 27, Haestrup teaches a method according to claim 20, further

comprising the step of:

attaching a reference to the used language, and/or the used dictionary (Col 3 line

58 – Col. 4 line 5).

Re claim 29, Haestrup teaches a method according to claim 20, in which words

not present in the dictionary are not replaced by references to the language dependent

dictionary and remain plain text (Col. 7 lines 35-48), or if possible are replaced by a

plurality of references to parts of the word that are present in the language dependent

dictionary (Col. 10 lines 10-24).

Re claim 30, Haestrup teaches a method according to claim 20, further comprising the step of:

retrieving words from said language dependent database through references received in text messages (Col. 8 line 50 – Col. 9 line 6) from other terminals, preferably PCs, servers or mobile communication terminals (Col. 2 lines 32-41 & Fig. 2 item 20).

Re claim 32, Haestrup teaches a method according claim 20, wherein said language dependent dictionary is a dictionary associated with a predictive editing program (Col. 1 lines 27-58 & Fig. 1 item 7) that receives unambiguous keystrokes (Fig. 8).

Re claim 33, Haestrup teaches a method according to any of claims 20, wherein said language dependent dictionary is a dictionary associated with a predictive editing program that receives ambiguous keystrokes (Col. 1 lines 27-58 & Fig. 1 item 7).

Re claim 34, Haestrup teaches a method according to claim 20, wherein said language dependent dictionary is a dictionary (Col. 8 line 50 – Col. 9 line 6) associated with a spell checking function of a text editing program (Col. 7 lines 61-67).

3.   Claims 10, 15, 18, 19, 38, and 39 rejected under 35 U.S.C. 103(a) as being unpatentable over Haestrup US 6223059 B1 (hereinafter Haestrup) in view of Lisle

et al. US 4843389 A (hereinafter Lisle) and further in view of Barbosa et al. US

20040192329 A1 (hereinafter Barbosa).

Re claim 10, Haestrup teaches a mobile terminal according to claim 1, calendar

entries or tasks between the mobile terminal and other terminals (Col. 2 lines 32-41 &

Fig. 2 item 20) that store text entries as references to said language dependent

dictionary (Col. 2 lines 32-41 & Fig. 2 item 20).

However, Haestrup in view of Lisle fails to teach a synchronization program for

synchronizing data (Barbosa [0060] & Fig. 6).

Barbosa teaches a worker's handheld device (or device assigned to the worker

for the shift) may be synchronized 901 with a server to receive an updated template

containing tasks for the worker at the beginning of every work shift. A project member

beginning a workday at a job site or on a shared project would generally be expected to

ascertain the status of the project and attempt to complete tasks embodied within a

template. The projects tasks and template are generally expected to be completed by

the worker 902 during and before the end of a shift. The worker reports 903 on the

status of tasks at the end of the workday via synchronization with a server through wired

and/or wireless means.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention synchronization capabilities between terminals. Synchronization

allows for the ability of one terminal to update any number of additional terminals

automatically, where a specific task can be processed and tracked through a server

wirelessly, rendering a list of tasks transmitted.

Re claim 15, Haestrup in view of Lisle fails to teach a mobile terminal according to claim 14, characterized in that said keypad comprises keys displayed on a touch screen (Barbosa [0046]).

Barbosa teaches a handheld data management device in accordance with the present invention may be in the form of any one of a number of commercially available hand-held devices such as personal digital assistants (PDAs), two-way pagers, and Web/WAP-enabled mobile phones. Referring to FIG. 1, a device 10 exemplary of a prior art PDA that could implement software and/or communication methods in accordance with carrying out methods of the invention is illustrated. The device 10 includes an outer housing 12 sufficiently small to be easily portable such that it substantially fit within the palm of a users hand, a display 14 that may also preferably include touch-screen technology to operate in combination with control buttons 16 to provide a User Interface (UI) for operating, controlling and/or otherwise interacting with the device 10. Not shown on the device 10, but well known in the art to be incorporated in such devices are communication ports (wired and wireless).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention a keypad with touch screen capability. Touch screen would allow for a broad range of methods to enter data, such as with the use of a stylus or even the use of ones fingernail rather than a finger tip. Additionally, someone with the inability to press mechanical keypads may find it easier to use a touch screen technology. A PDA is well known to incorporate the use of a touch screen.

Re claims 18 and 38, Haestrup in view of Lisle fail to teach a mobile terminal according to claim 1, characterized in that said mobile terminal is a personal, digital assistant (PDA) (Barbosa [0046]).

Barbosa teaches a handheld data management device in accordance with the present invention may be in the form of any one of a number of commercially available hand-held devices such as personal digital assistants (PDAs), two-way pagers, and Web/WAP-enabled mobile phones. Referring to FIG. 1, a device 10 exemplary of a prior art PDA that could implement software and/or communication methods in accordance with carrying out methods of the invention is illustrated. The device 10 includes an outer housing 12 sufficiently small to be easily portable such that it substantially fit within the palm of a users hand, a display 14 that may also preferably include touch-screen technology to operate in combination with control buttons 16 to provide a User Interface (UI) for operating, controlling and/or otherwise interacting with the device 10. Not shown on the device 10, but well known in the art to be incorporated in such devices are communication ports (wired and wireless).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention using a PDA as a mobile terminal incorporating the uses of a mobile phone. Using a PDA with mobile phone capabilities allows for function similar to that of a PC, where in additional to tasks (calendar, address, etc.), the ability to communicate through the operation of a mobile phone introduces a user friendly

operation. The combination of a mobile phone and PDA allow for the design of a
Smartphone such as Simon.

        Re claims 19 and 39, Haestrup in view of Lisle fail to teach a mobile terminal
according to claim 1, characterized in that said mobile terminal is a combination of a
mobile phone and a personal digital assistant (Barbosa [0046]).

        Barbosa teaches a handheld data management device in accordance with the
present invention may be in the form of any one of a number of commercially available
hand-held devices such as personal digital assistants (PDAs), two-way pagers, and
Web/WAP-enabled mobile phones. Referring to FIG. 1, a device 10 exemplary of a
prior art PDA that could implement software and/or communication methods in
accordance with carrying out methods of the invention is illustrated. The device 10
includes an outer housing 12 sufficiently small to be easily portable such that it
substantially fit within the palm of a users hand, a display 14 that may also preferably
include touch-screen technology to operate in combination with control buttons 16 to
provide a User Interface (UI) for operating, controlling and/or otherwise interacting with
the device 10. Not shown on the device 10, but well known in the art to be incorporated
in such devices are communication ports (wired and wireless).

        Therefore, it would have been obvious to one of ordinary skill in the art at the
time of the invention using a PDA as a mobile terminal incorporating the uses of a
mobile phone. Using a PDA with mobile phone capabilities allows for function similar to
that of a PC, where in additional to tasks (calendar, address, etc.), the ability to

communicate through the operation of a mobile phone introduces a user friendly

operation. The combination of a mobile phone and PDA allow for the design of a

Smartphone (such as the Smartphone Simon introduced in 1992).

4.   **Claim 28 rejected under 35 U.S.C. 103(a) as being unpatentable over**
Haestrup US 6223059 B1 (hereinafter Haestrup) in view of Lisle et al. US 4843389
A (hereinafter Lisle) and further in view of Adams et al. US 5490211 A (hereinafter
Adams).

Re claim 28, Haestrup teaches said language dependent dictionary (Col. 4 lines

25-38)

the references replaced by the corresponding words as plain text (Col. 4 lines 25-

38)

However, Haestrup in view of Lisle fails to teach a method according to claim 27,

wherein said text message is sent to said other terminal via a dedicated terminal having

a copy, whereby said dedicated terminal retrieves the words of said text message and

passes the text message on to said other terminal (Adams Col. 10 lines 14-35 & Fig.

3c).

Adams teaches the central processing unit 24, FIG. 1, determines if a send

message request was initiated at the display terminal 36. If a send message was

requested, the program proceeds to step 116 of FIG. 3C. In step 116, FIG. 3C, a

determination is made if a written text message is being sent to another or destination

display terminal 36B, 36C-N coupled with the automatic call distributor 20. If the written

data text message is not sent to a display terminal 36 the operation goes to step 117, to send a message to a network supervisor terminal 50, FIG. 1. The processing is completed for the send message request at step 129. If the written text message from the sending display terminal 36 is being sent to a destination display terminal 36B, then in step 118 information relating to the identification of the sending display terminal, the day of the week, day of the month, year, hour and minute that the written text message was sent from the sending terminal is stored in the message build area of the switch operations memory 26. In step 120, FIG. 3C, the sent written text message in copied into the message build storage of the central processing unit 24, FIG. 1, switch operations memory 26.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention retrieving and replacing words and having a copy of a language dictionary on a dedicated terminal. Using a dedicated terminal allows for the backup of continuously updated and transmitted data, where various terminals can receive the same data for editing/verification purposes in addition to backing up data on different terminals.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6011554 A, US 5715468 A, US 6996520 B2, US 6081774 A, US 6275789 B1, US 6307549 B1, US 5963940 A, US 5991713 A, US 5951623 A, US

5999949 A, US 6535886 B1, US 6192333 B1, US 20010054072 A1, US 20040215701

A1, US 20020032609 A1, US 6370566 B2, US 6438584 B1.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael C. Colucci whose telephone number is (571)-

270-1847. The examiner can normally be reached on 9:30 am - 6:00 pm, Monday-

Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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